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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,960	06/07/2001	Ju Chun Yeo	049128-5013	5946

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT PAPER NUMBER

2674

DATE MAILED: 05/21/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/874,960

Applicant(s)

YEO ET AL.

Examiner

Jennifer T Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-19 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7,8,11,12 and 15 is/are rejected.
- 7) ☒ Claim(s) 3,6,9,10,13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. In the specification, the phrase "the eighth data line DL8 receives the red data signal G3" (page 4, lines 27-28) should be changed to -- the eighth data line DL8 receives the green data signal G3--, the phrase "in the pixel on the fifth data line DL7" (page 5, lines 5-6) should be changed to -- in the pixel on the fifth data line DL-- and the phrase "while being reverse-sequentially applied in the third and fourth frames" (page 14, lines 19-20) should be changed to -- while being reverse-sequentially applied in the second and third frames--.

Drawings

2. In Fig. 7A, "GL2" should be changed to -- GL4-- . In Fig. 7B, "GL1" should be changed to -- GL2-- and "GL2" should be changed to -- GL3--.

Claim Objections

3. Claim 13 is objected to because of the following informalities: the phrase "The method as claimed in claim 1" should be changed to -- The method as claimed in claim 7-- . Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 1, 2, 4, 5, 7, 8, 11, 12 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Ha (U.S. Patent No. 6,333,729).

Regarding claims 1 and 7, referring to Fig. 2, Ha teaches a method of driving a liquid crystal display including a plurality of data lines (DL1-DL2400), a data driver (24a, 24b) for driving the data lines (DL1-DL2400), and a plurality of demultiplexors (DEMUX1-DEMUX600) arranged between the data lines (DL1-DL2400) and the data driver (24a, 24b) to apply a data supplied from the data driver (24a, 24b) to a desired number of data lines (DL1-DL2400), said method comprising the steps of: supplying said data to the desired number of data lines (DL1-DL2400) on a basis of first sequence in a first horizontal period; and supplying said data to the desired number of data lines (DL1-DL2400) on a basis of second sequence in a second horizontal period following the first horizontal period (col. 2, lines 12-55, col. 3, lines 11-67 and col. 4, lines 1-7).

Regarding claims 2 and 8, referring to Fig. 2, Ha teaches the data is sequentially supplied to the desired number of data lines (DL1-DL2400) in the first horizontal period (col. 2, lines 12-55, col. 3, lines 11-67 and col. 4, lines 1-7).

Regarding claims 4 and 11, Ha teaches a scanning signal is applied to any one of a plurality of gate lines (GM1-GM600) arranged in a direction crossing the data lines (DL1-DL2400) in said horizontal period.

Regarding claims 5, 12 and 15, Ha teaches each of the demultiplexors (DEMUX1-DEMUX600) includes a desired number of switching devices (MN1-MN4), which are sequentially supplied with a control signal in said first horizontal period (col. 3, lines 42-67).

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6. Claims 3, 6, 9, 10, 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 16-19 are allowed.

8. The prior art made of record and not relied upon is considered to pertinent applicant's disclosure.

Kusada (U.S. Patent No. 5,192,945) teaches device and method for driving a LC panel.

Ino et al. (U.S. Patent No. 6,424,328) teaches LCD apparatus.

Kim (U.S. Patent No. 6,097,362) teaches driver for LCD.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**.

The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to: 703-872-9314 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding

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should be directed to the Technology Center 2600 Customer Service Office whose
telephone number is 703-306-0377.

Jennifer T. Nguyen
Patent Examiner
Art Unit 2674



RICHARD HUERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600